

**Process**

**Added material**

**Step 1**

**Delivery of  
deep-frozen horse tendons**

Storage of tendons at -18 °C to -25 °C

Controls: appearance, ash, degradability by collagenase



**Step 2**

**Peeling of horse tendons**

Storage of peeled tendons  
at -18 °C to -25 °C



**Step 3**

**Slicing of peeled horse tendons**

Disinfection of tendons  
with 70 % ethanol

Washing of tendons with water or salt solution

Deep-freezing

Slicing

70 % ethanol

←  
water for injection or salt solution

←



**Step 4**

**Washing and disinfection of tendon slices**

Washing with water or salt solution

Disinfection with 70 % ethanol

Washing with 0.45 % lactic acid in salt solution

water for injection or salt solution

←

70 % ethanol

←

0.45 % lactic acid in salt solution

←



**FIG. 1**

Process (continued)

Added material

Step 5

Production of collagen gel

Soaking of tendon slices

Homogenisation of tendon slices

0.45 % lactic acid in salt solution

←

0.45 % lactic acid in salt solution

←



Step 6

Foaming

Whipping of air into the collagen gel

Fractionation of the foam

Homogenisation of the foam

sterile air

←



Step 7

Drying of collagen foam

Draining of the foam

Neutralisation of the foam with NH<sub>3</sub>

Drying of the foam

NH<sub>3</sub>

←

IPC: weight of dried collagen sponge blocks



Step 8

Cutting of collagen sponge blocks to strips

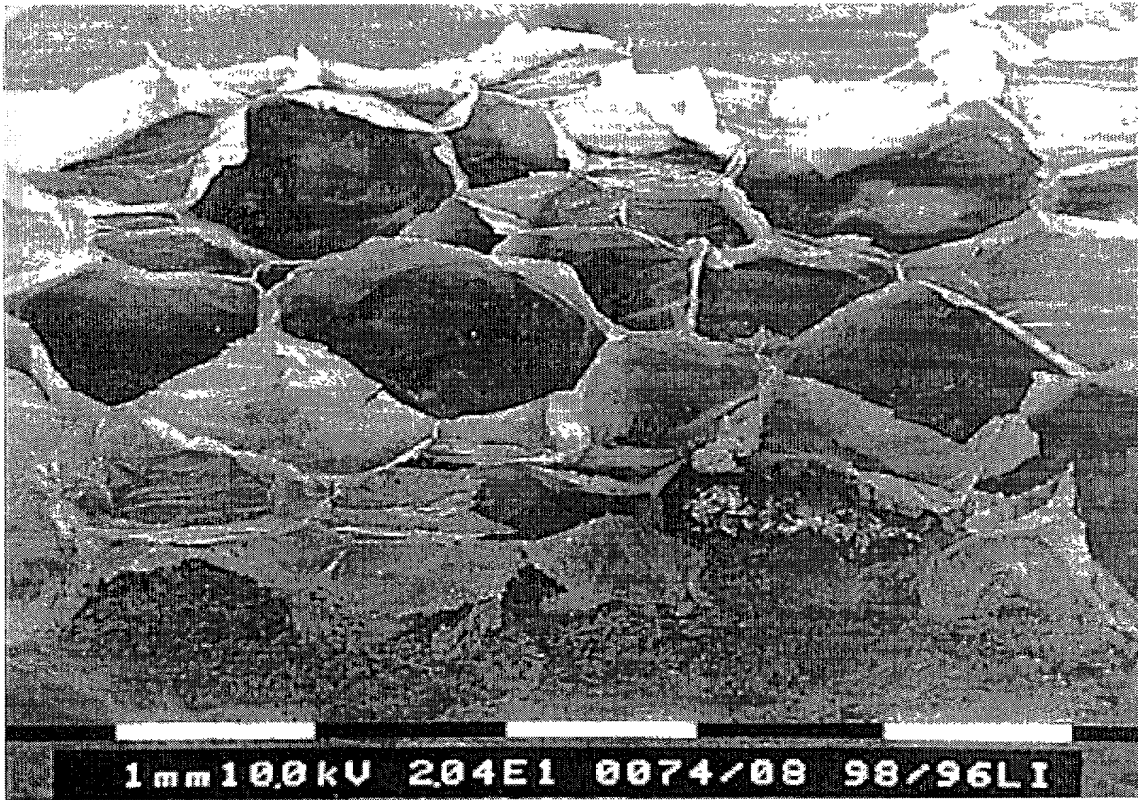
IPC: weight of collagen sponge strips



Step 9

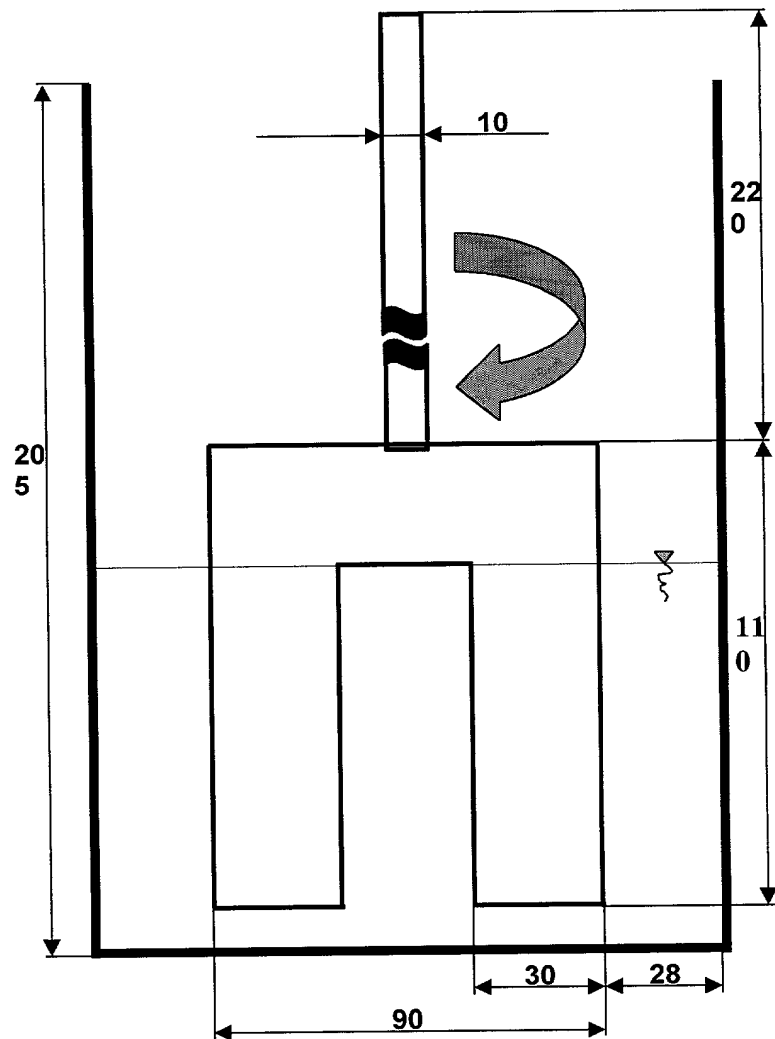
Sorting the collagen sponge strips according to structural properties

FIG. 2



**Fig. 3**

(courtesy Prof. Dr. Roman Carbon, Chirurgische Univ. Klinik Erlangen, Germany)



**Fig. 4**